

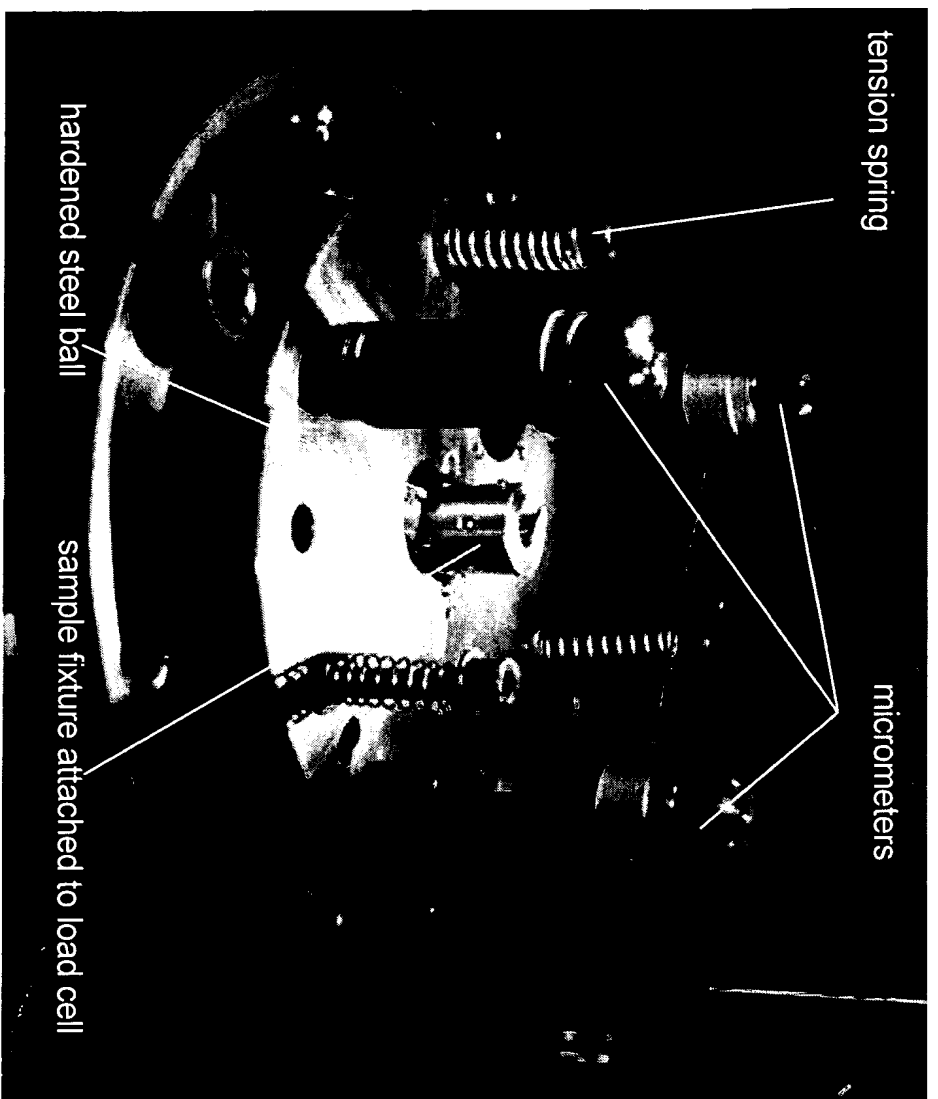
Digital CCD camera

Microscope

Top fixture with parallelity adjustment  
Moving plate of tensile testing machine

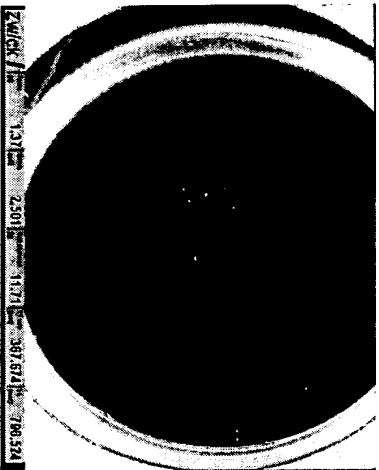
Displacement transducer  
Load cell attached to lower sample fixture  
Fixed plate of tensile testing machine

Photograph 1: Set up for cavitation strength measurement

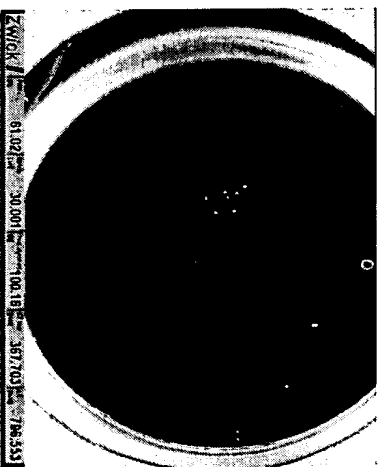


Photograph 2: Top plate with parallelly adjustment.

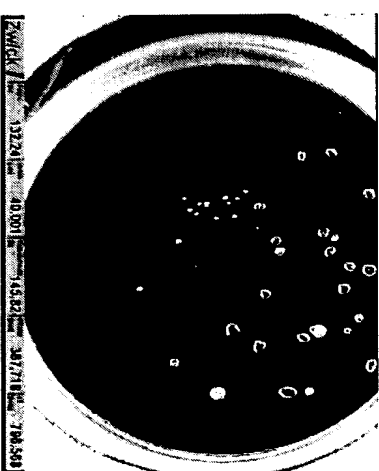
PRIMARY COATING A



no cavities at  $F=1.37$  N

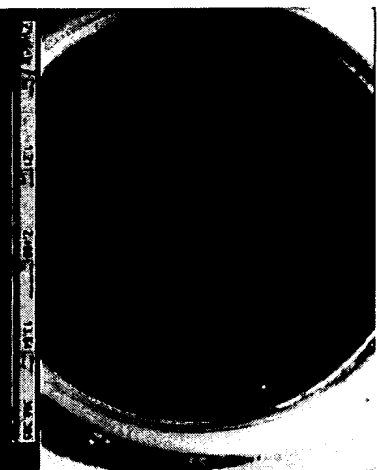


2 cavities at  $F=61.02$  N

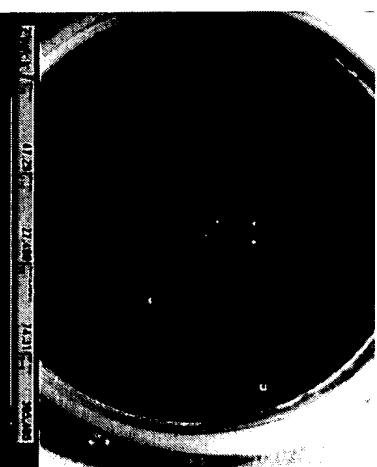


25 cavities at  $F=132.24$  N

PRIMARY COATING B



no cavities at  $F=1.21$  N

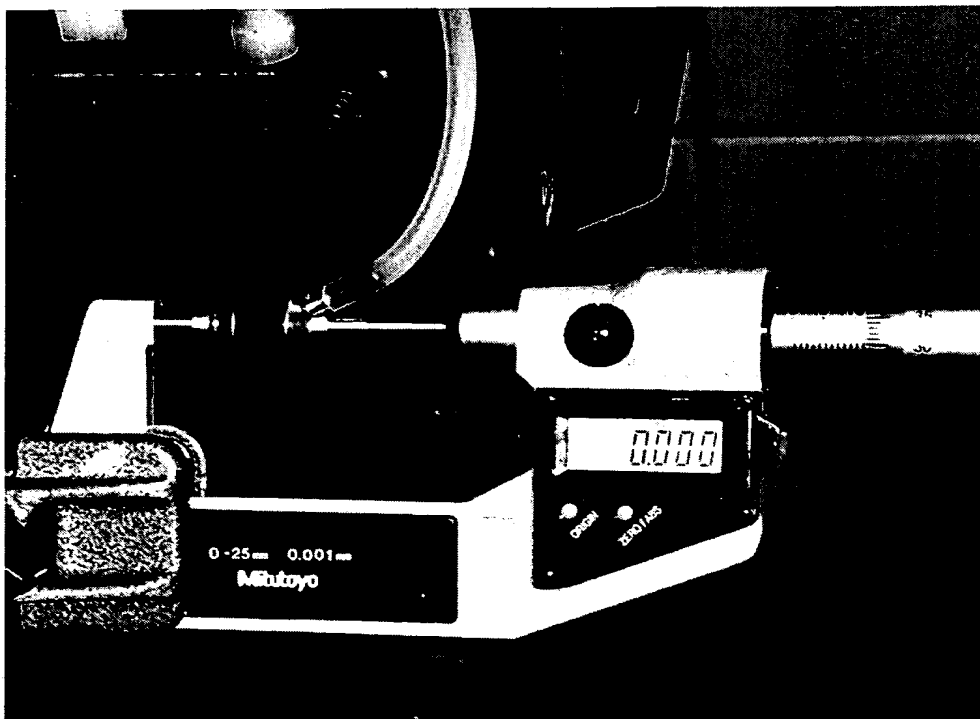


2 cavities at  $F=47.29$  N



25 cavities at  $F=119.35$  N

Photograph 3: samples of two primary coatings A and B with cavities; appearance of cavities as a function of the applied force



Photograph 4: Micrometer set-up in sample preparation for cavitation strength measurement

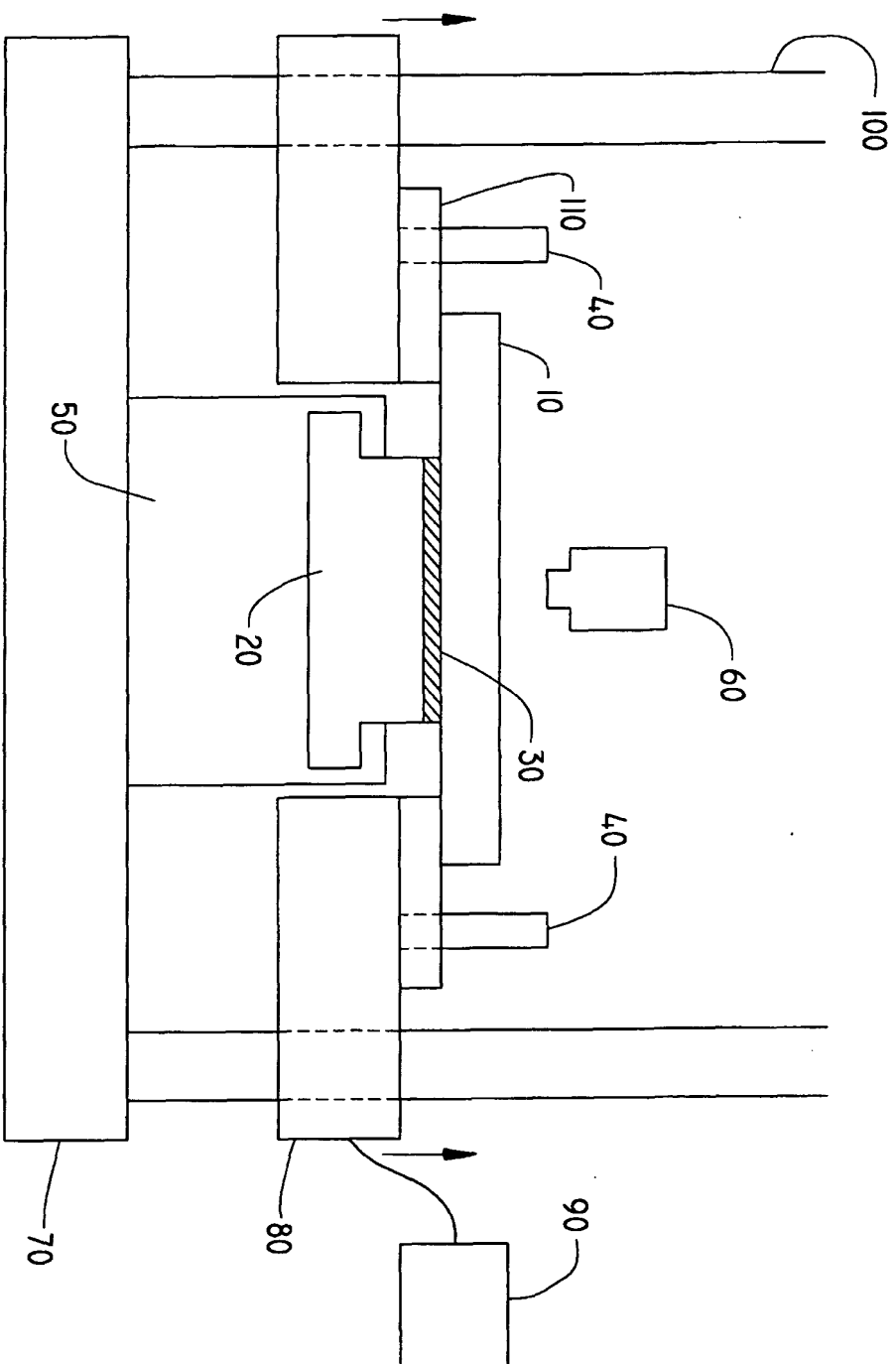
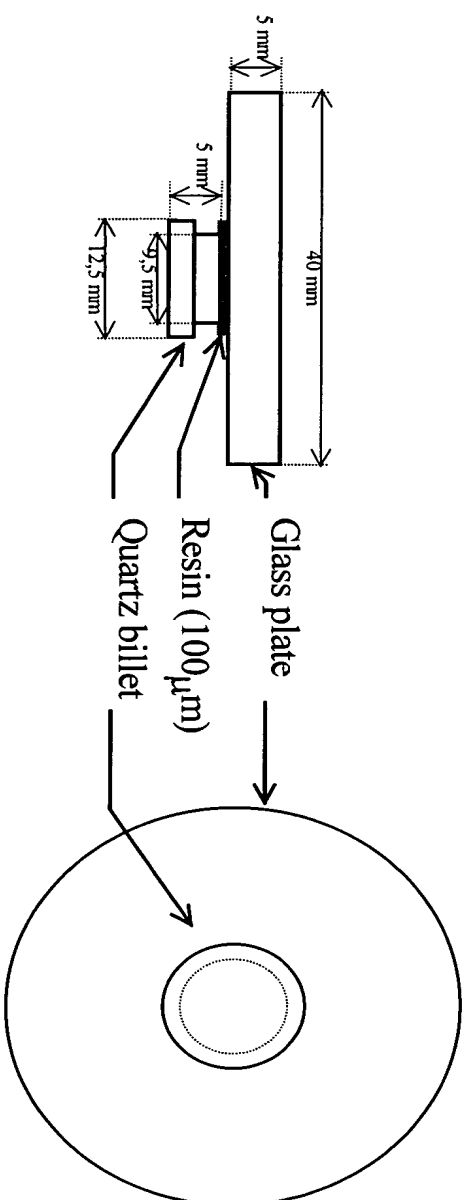


Figure 1: apparatus used for determining the cavitation strength of a sample.



5 Figure 2: Sample geometry.

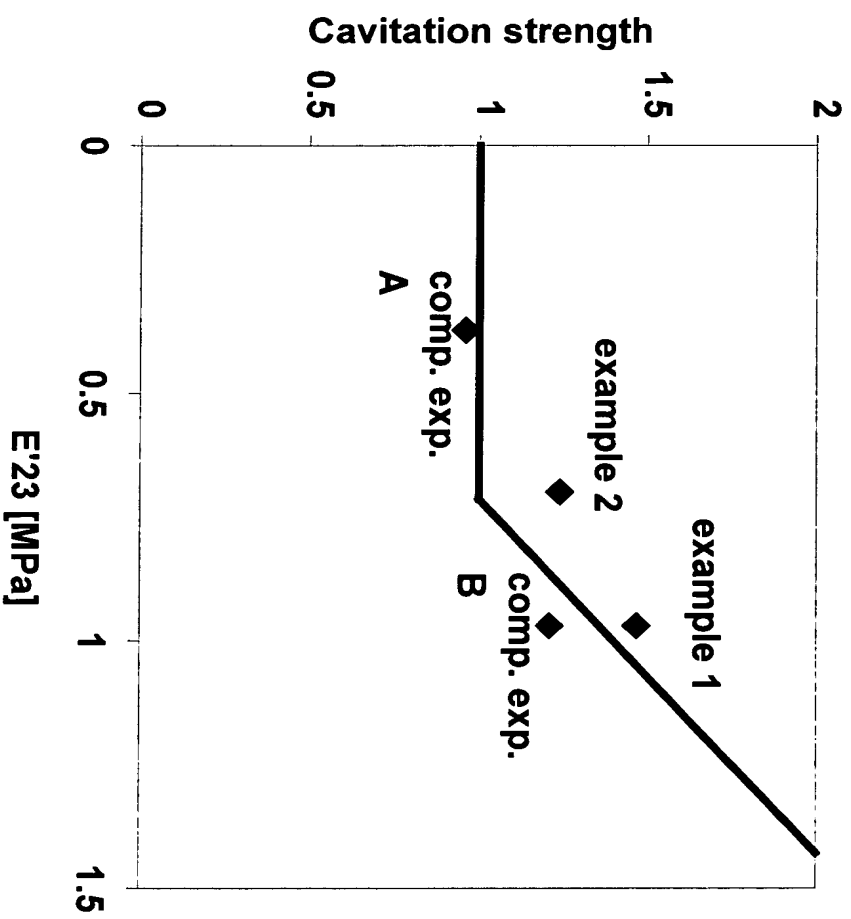


Figure 3: Cavitation strength at the tenth cavitation  $\sigma_{cav}^{10}$  as a function of  $E'_{23}$

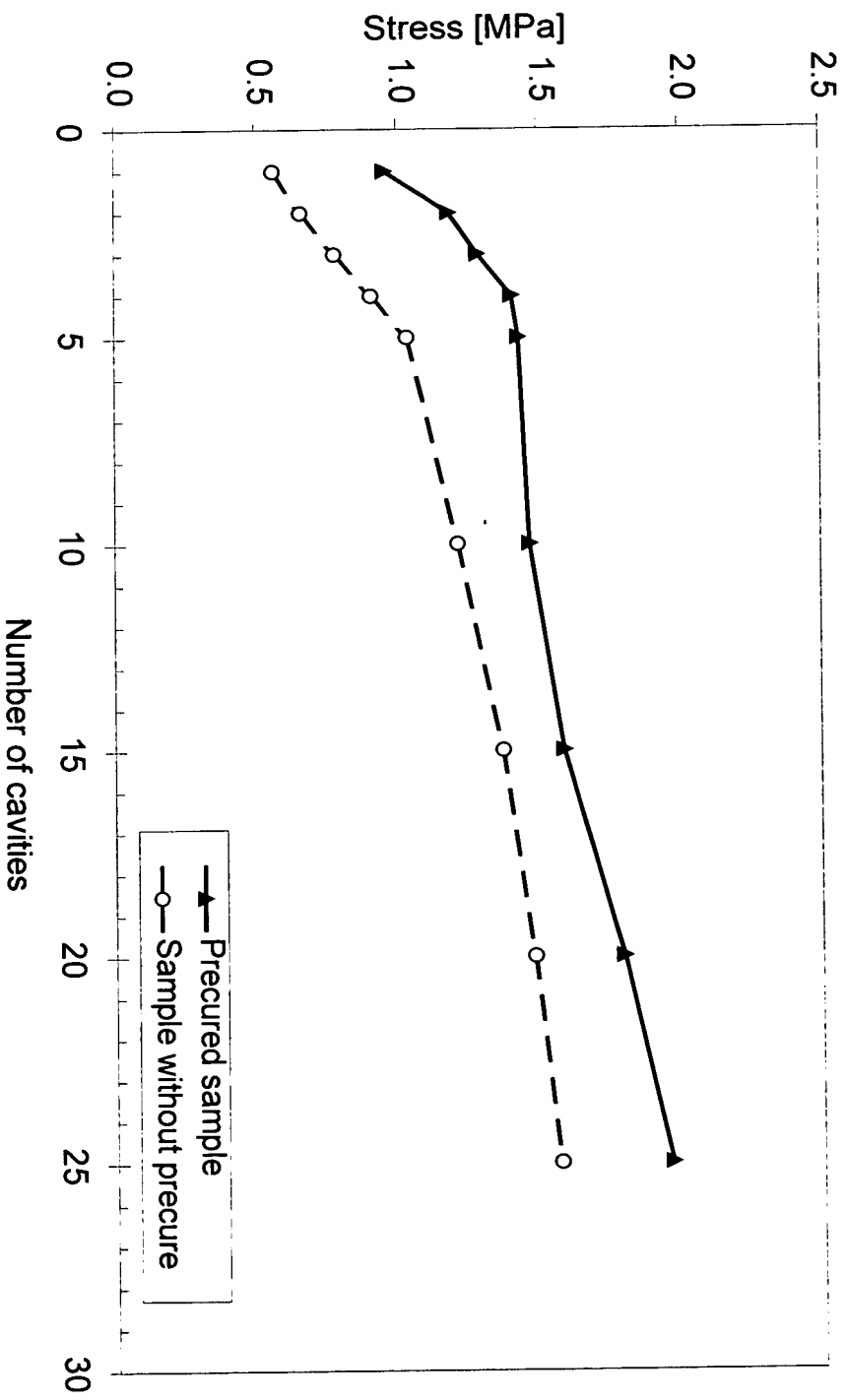


Figure 4: Cavitation strengths of a primary coating sample with and without precure



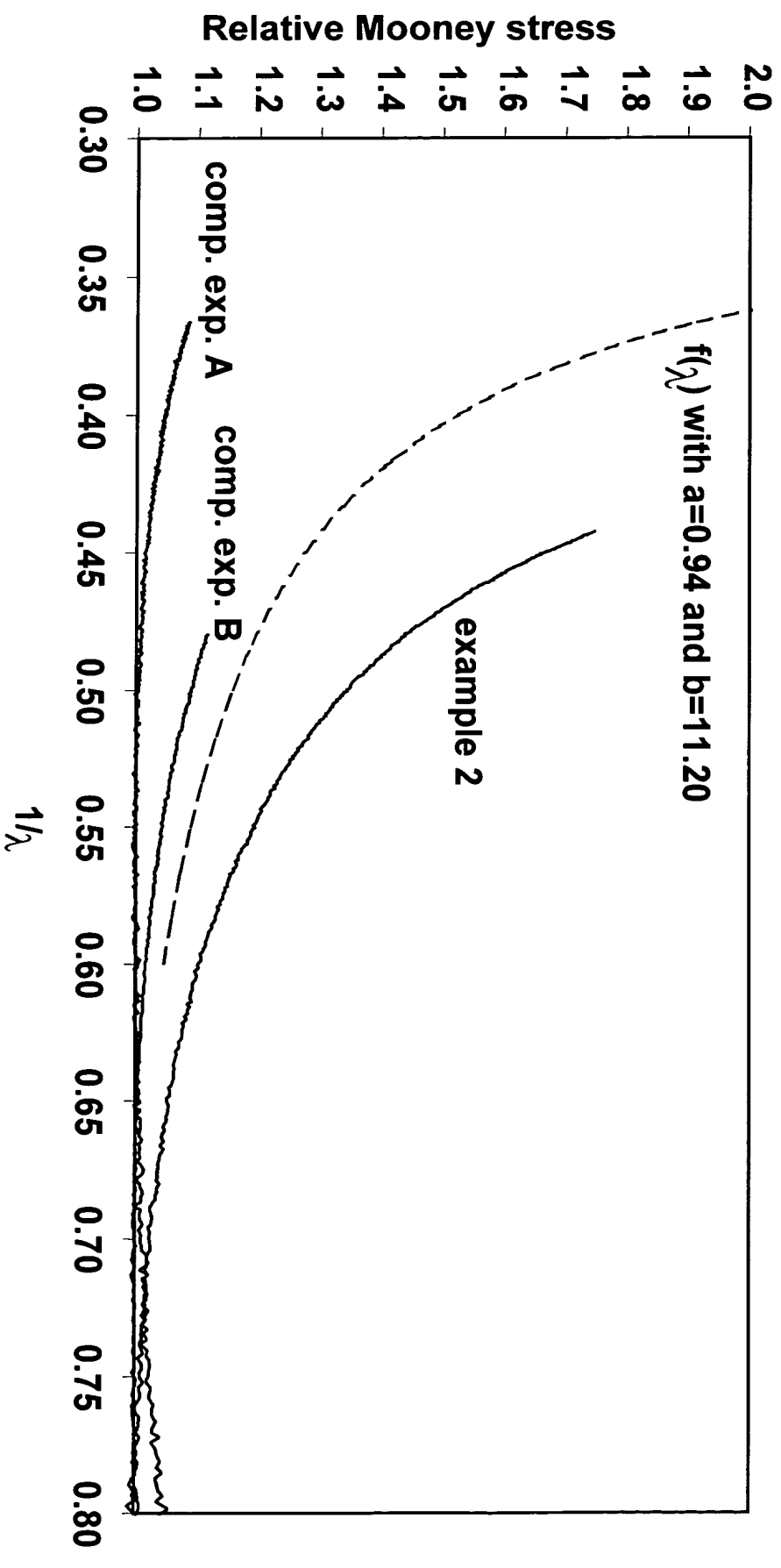


Figure 5: Relative Mooney plots of primary coatings